

Notice of Allowability

Application No.

10/670,403

Examiner

Hal I. Kaplan

Applicant(s)

VOLL ET AL.

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amendments dated December 21, 2006.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 12/21/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

IN THE CLAIMS:

1. (Currently Amended) A distance extender for increasing a distance between a first device and a second device in electrical communication with the first device, the distance extender comprising:

- an electrical cable electrically coupled between the first device and the second device and comprising:
 - a first end;
 - a second end; and
 - a plurality of wires extending between the first end and the second end;
- a first subsystem electrically coupled to the first end of the electrical cable and to the first device;

wherein the first subsystem includes a voltage boost circuit;

- a second subsystem electrically coupled to the second end of the electrical cable and to the second device;

a switch electrically coupled to the second end of the electrical cable and to the second device;

a third subsystem ~~include~~ including a voltage boost circuit; and

a fourth subsystem ~~include~~ including a voltage boost circuit;

wherein:

the first device or the second device generates a data signal and the first device provides an electrical power signal;

the plurality of wires includes a first wire;

the data signal and the electrical power signal are simultaneously transmitted between the first device and the second device over the first wire;

the third subsystem is electrically coupled between the switch and the fourth subsystem;

the fourth subsystem is electrically coupled between the third subsystem and the second device; and

the switch is electrically coupled between the second subsystem and the third subsystem.

Information Disclosure Statement

2. The supplemental information disclosure statement (IDS) submitted on December 21, 2006 has been received. The references cited therein have been considered; however, the references through which a line has been drawn will not be printed on the front of the issued patent because the citations are not compliant with MPEP §609. Each publication must be identified by publisher, author (if any), title,

relevant pages of the publication, and date and place of publication. The date of publication supplied must include at least the month and year of publication, except that the year of publication (without the month) will be accepted if the applicant points out in the information disclosure statement that the year of publication is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the particular month of publication is not in issue. The place of publication refers to the name of the journal, magazine, or other publication in which the information being submitted was published. See MPEP §609.04(a)(I). In addition, references 2-5 have publication dates that are later than the effective U.S. filing date.

Claim Objections

3. Claim 1 is objected to because of the following informalities: Claim 1, lines 15 and 16 contain the word "include". It appears these should be "including". Appropriate correction is required.

Allowable Subject Matter

4. Claims 1-36 allowed.

5. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowed because none of the prior art of record discloses or suggests the claimed switch connection, third and fourth subsystems, and voltage boost circuits, in combination with the remaining claimed features.

Claims 2-12 and 36 are allowed because none of the prior art of record discloses or suggests the claimed first subsystem including a pre-emphasis circuit, in combination with the remaining claimed features.

Claims 13-27 are allowed because none of the prior art of record discloses or suggests the generation and transmission of a video signal, in combination with the remaining claimed features.

Claims 28-35 are allowed because none of the prior art of record discloses or suggests the step of modulating the data signal, in combination with the remaining claimed features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

6. Applicant's arguments, see Remarks, filed December 21, 2006, with respect to the objections and rejections have been fully considered and are persuasive. The objections and rejections have been withdrawn.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. the US patents to Fisher et al. (6,989,735) and Tustison et al. (6,995,658), and the US patent application publication to Hung et al. (2004/0232768), disclose similar systems.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800